

Work Order ID 54815 - 2

December 22, 2009 1:26:55 PM

Split



Page 2

Item ID: D3709-3

Accept



Setup Start



Revision ID:

Item Name: Angle

Stop



Start Date: 1/05/10 Start Qty: 6.00



Cust Item ID:

Required Date: 1/15/10 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

130



Operation  
Description

Small Fab

Set Up/  
Run Hours

0.00

Draw  
Number

SB

Draw  
Rev.

10/03/09

Plan  
Code

6

Accept  
Qty

4

Reject  
Qty

0

Reject  
Number

0

Insp.  
Stamp

Pb →

Small Fab



Memo

Form as per dwg D3709

140



QC5- Inspect part completeness to step on W/O

QC

Quality Control

0.00

Sub 10

0.00

6

4

150



Chemical Conversion Coat per QSI005 4.1

HandFinish

Hand Finishing

0.00

0.00

10/03/10

Yb

0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3709-3 PAR #: Fault Category: Small Fob NCR: Yes No DQA: Date: 10/03/09  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: *H* Date: 10/03/11

WORK ORDER NON-CONFORMANCE (NCR)								
DATE	STEP	Description of NC Section A	Corrective Action		Section B	Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng				
10/03/09	130	1 part crack at when was form R.C process	<i>1</i> 10/03/09	Scrap & destroy No-Replace	SB 10/03/09	SJ/10 10/03/10	<i>1</i> Rescan	<i>1</i> 10/03/09

NOTE: Date &amp; initial all entries

Split

# Work Order ID 54815-2

December 22, 2009 1:26:54 PM



Page 1

Item ID: D3709-3

Accept



Setup

Start



Revision ID:

Item Name: Angle

Stop



Start Date: 1/05/10 Start Qty: 6.00



Cust Item ID:

Required Date: 1/15/10 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan: C2

Date: 09/12/23 Tooling:

Date:

Run

Start



QC:

Date: SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr	Revision Nbr
D3709	Rev A

100



Waterjet

FLOW CNC Waterjet

6061 - 063

FLOW WATER JET

Memo

0.00

1-Cut as per Dwg D3709 Dwg Rev: A Prog Rev: A



\*\*\*\*grain direction on a 45 degree \*\*\*\* 2- Deburr if  
necessary

B 10-1-7

(10)

110



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

B 10-1-7

120



QC

Quality Control

QC8- Inspect parts - second check

0.00

Memo

0.00

⇒ S1061/07

(10)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

**Work Order ID 54815**

December 22, 2009 1:26:55 PM



Page 3

Item ID: D3709-3

Accept



Setup

Start



Revision ID:

Item Name: Angle

Stop



Start Date: 1/05/10 Start Qty: 6.00



Cust Item ID:

Required Date: 1/15/10 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160



QC3- Inspect Part Finish

0.00

BL 10-3-10

⑥ 8

QC

Memo

0.00

Quality Control

170



Identify as per dwg &amp; Stock Location: 83

0.00

10/03/11 C

Packaging

Memo

0.00

Packaging

180



QC21- Final Inspection - Work Order Release

0.00

10/03/11 JJ

QC

Memo

0.00

Quality Control

MM  
10-3-11

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

NOTE: Date & initial all entries

**Picklist Print**

Page 1

December 22, 2009 1:26:53 PM

Work Order ID: 54815



Parent Item: D3709-3



Parent Item Name: Angle

Start Date: 1/05/10

Required Date: 1/15/10

Comments:

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M6061T6S.063		Purchased		No			sf	55.7377	1.6800	3.		

6061-T6 .063 Sheet

WarehouseLocation

Main Warehouse

MAT

55.73772105

110551

29.6341211

112939

26.1036

Loc QtyLoc Code

112939

B 10-1-7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 54815
<b>Description:</b> ANGIE	<b>Part Number:</b> D 3709-3
<b>Inspection Dwg:</b> D 3709-3 <b>Rev:</b> A	<b>Page 1 of 1</b>

## FIRST ARTICLE INSPECTION CHECKLIST

**X** First Article  Prototype

Measured by:	HB	Audited by:	S	Prototype Approval:	N/A
Date:	10-1-7	Date:	10-1-7	Date:	N/A
Rev	Date	Change		Revised by	Approved
A		New Issue		KJ/JLM	

8

7

6

5

4

3

2

1

D

D

C

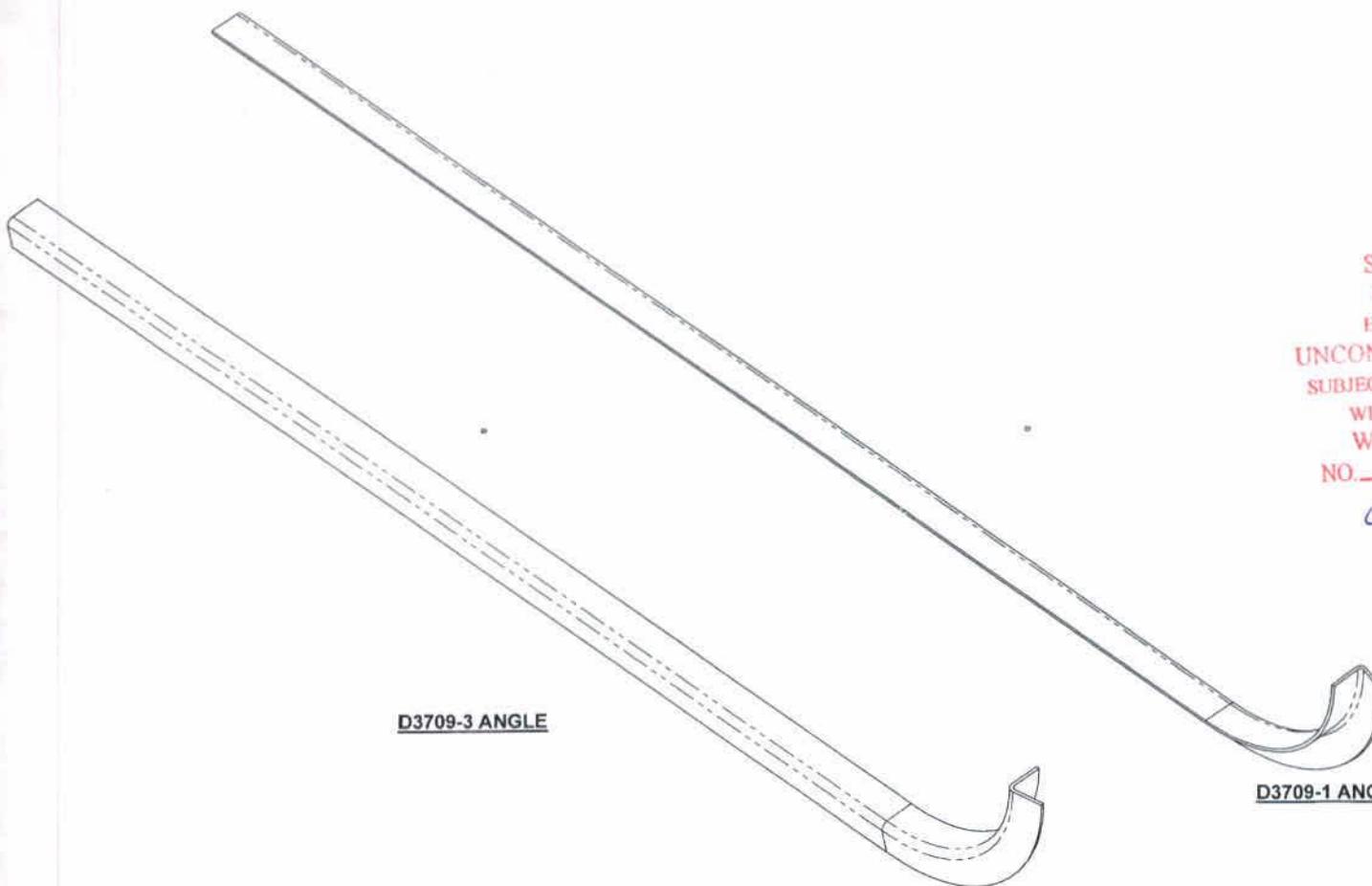
C

B

B

A

A



D3709-3 ANGLE

D3709-1 ANGLE

## NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.063 THICK PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF. DART SPEC. M6061T6S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3709-X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3709-1 = 0.24 lbs  
D3709-3 = 0.16 lbs

A	NEW ISSUE	MB	08.05.02
REV	DESCRIPTION	BY	DATE
1A	DART AEROSPACE LTD		
	HAWKESBURY, ONTARIO, CANADA		
DESIGN	1A	DRAWING NO.	
DRAWN	b	REV. A	
CHECKED	pd	D3709	
MFG. APPR.	1A	SHEET 1 OF 3	
APPROVED	1A	TITLE	
DE APPR.	1A	SCALE	
DATE	08.05.02	NTS	
ANGLE			

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RELEASED  
08/04/09

8

7

6

5

4

3

2

1

D

D

C

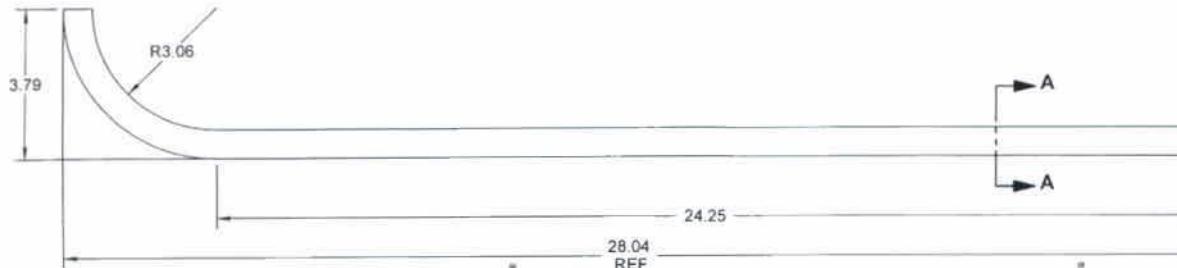
C

B

B

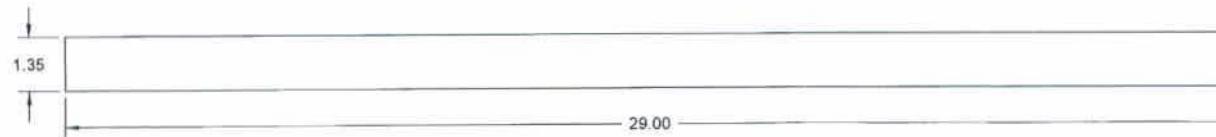
A

A



**D3709-1 ANGLE**  
(MAKE FROM D3709-1F)

**SECTION A-A**  
SCALE 2X



**D3709-1F ANGLE FLAT PATTERN**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 54815

**RELEASED**  
09/09/01

DESIGN	5	DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		REV. A
MFG. APPR.		DRAWING NO. D3709
APPROVED		SHEET 2 OF 3
DE APPR.		TITLE ANGLE
DATE	08.05.02	SCALE NTS

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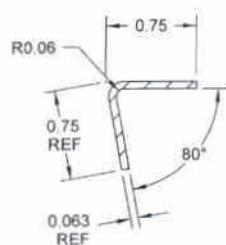
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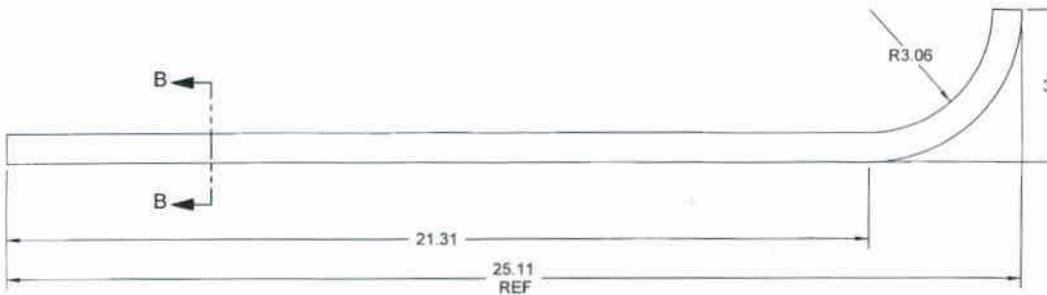
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8 7 6 5 4 3 2 1

D



**SECTION B-B**  
SCALE 2X



**D3709-3 ANGLE**  
(MAKE FROM D3709-3F)

C

D

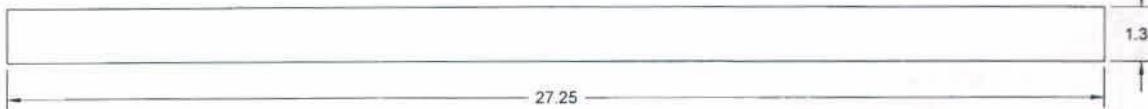
C

B

B

B

GRAIN  
DIRECTION



**D3709-3F ANGLE FLAT PATTERN**

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WORK ORDER  
NO. 54815

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*07/09/02*

DESIGN	<i>12</i>	<b>DART AEROSPACE LTD</b>
DRAWN	<i>6</i>	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>12</i>	DRAWING NO. <b>D3709</b>
MFG. APPR.	<i>14</i>	REV. A
APPROVED	<i>14</i>	SHEET 3 OF 3
DE APPR.	<i>14</i>	TITLE <b>ANGLE</b>
DATE	<b>08.05.02</b>	SCALE NTS

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8 7 6 5 4 3 2 1